San Bernardino County Information Services Department Geographic Information System (GIS)

FTP Secure Login Instructions

Introduction

The purpose of the document to present instructions on how to use a third party application to transfer data files from the San Bernardino County GIS FTP Server Directories using File Transfer Protocol (FTP). These instructions are intended for the person who has requested and obtained the appropriate directory information, including a Username and Password. Currently there are three types of FTP User Accounts:

- 1. <u>Public FTP User Account:</u> This account gives you access to all the Public folders on the appropriate GIS FTP Server and directory.
- 2. <u>Parcel / Basemap FTP User Account:</u> This account gives you access to the Parcel Basemap and Centerline folder on the GIS FTP Server and directory.
- 3. <u>Secure FTP User Account:</u> This account gives you secured access to a Specific and Reserved folder(s) on the GIS FTP Server and directory.

For the purpose of these instructions we will focus on the Public FTP User Account and show Filezilla displays within the instructions.

Instructions

The following instructions are presented in a step by step methodolgy so that the FTP customer can can quickly grasp how to set up the third party FTP application. With that being said the following FTP Applications are available to use for the access and transfer of GIS Data from the GIS FTP Server:

1. Windows

- a. FileZilla
- b. WinSCP
- c. Free FTP

2. MAC

- a. Filezilla for MAC
- b. Classic FTP
- c. Cross FTP
- d. Cyber Duck

The Information Services Department has updated the FTP Server for GIS data files to only accept secure connections. Additionally, the connection would require a third party FTP application to facilitate this connection. For every connection the following field values would be necessary to complete a successful connection to a particular directory and or folder on the GIS Server:

<u>Field</u>	<u>Description</u>	Value Example
Server or Host	Sever.Domain.Type	GIS1.sbcounty.gov
	Also called: Fully Qualified Domain Name	
Protocol or	Enter the type of FTP server you	FTP - File Transfer Protocol
Setting	will connect to (such as FTP or SFTP).	Or
		SFTP – SHH File Transfer Protocol
Port	Nunerical value a port. Only if it differs from the standards.	(990 communication channel, and uses port 989 data transfers)
		Or
		Blank
		(if Require Implicit FTP or TLS is set for Encryption)
Encryption:	Whether, and how, the FTP connection should be encrypted.	Use Plain FTP
		Or
		Require Implicit FTP or TLS
		Or
		Require Implicit FTP or TLS
Login Type	The type of login that will take place, when appropriate.	The options are:
		Anonymous: You can't enter a
		username and password. In this case, the username is
		always "Anonymous".
		Normal: You have to enter a username and, if required, a

		password Preferred -
		password. – Freierred -
		Ask for password: FileZilla asks you the password during logon, and it remembers the password during the session.
		Interactive: FileZilla asks for the password, and asks again for every new connection to the server.
		Account: Selecting this enables the "Account" field in the bookmark's settings. This account type is for FTP only; SFTP does not have support for it.
User	The user ID to use when	gims_Public
	connecting.	ge_i d.ze
		MyGIS.sbcounty.gov loginname
	The value that is provided via	
	Email answering a reqest for	
	access submitted in the GIS website.	
Password	Optional value depanding on the	R8yOTOg3!
	login type chosen.	, ,
		(It is Case Sensative)
	The value that is provided via	
	Email answering a reqest for	
	access submitted in the GIS	
Tropfor Made	website.	Descive FTD must be set
Tranfer Mode	Specifies how transfer may take	Passive FTP must be set
	place.	

The following instructions will guide you in completed the FTP process:

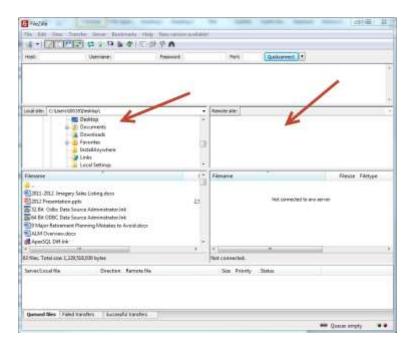
- 1. You can use any FTP client program that supports secure FTP. Note that this is FTPS and not an SFTP connection.
- 2. If you do not have an FTP client program that supports secure FTP, you can download any of the FTP Applications listed above. FileZilla for free and the preferred FTP application for PC and MAC, and could be found by double-click on the FTP application you refer above. Filezilla can be download from the internet site location at: http://filezilla-project.org/download.php

3. After you install the FTP application, execute the FTP application by double clicking on the icon on your desktop. The following pop-up will be displayed for the Filezilla FTP Application:

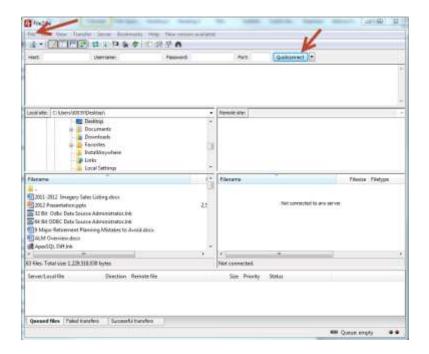


Simply click on the "Run" button to continue.

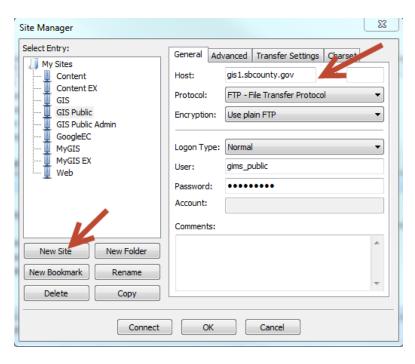
4. Filezilla will display the following pop-up window presenting you the FTP application and its options and features: Note that Local Site (Directories) and Filename are connected, but that the connection to the Remote Site is not made.



5. In Filezilla, the **Quick Connect button will not work** to gain connection, because it does not set the security settings or port. Therefore, you will need to select the Site Manager option under File Menu, or press the CTRL and S keys simultaneously (at the same time).



6. After executing the Site Manager the FTP application will display the Site Manager window:



The example above display how the settings would look at if you are attempt to set a site file for the GIS Public FTP Server Directories.

7. First create a New Site by pressing the "New Site" button. A Site file will appear under "My Site", simply type in an appropriate name that identifies the site.

8. On the left hand side on the window enter the following:

Host = "gis1.sbcounty.gov" Port: [leave blank]

Protocol = "FTP -FTP Transfer Protocol

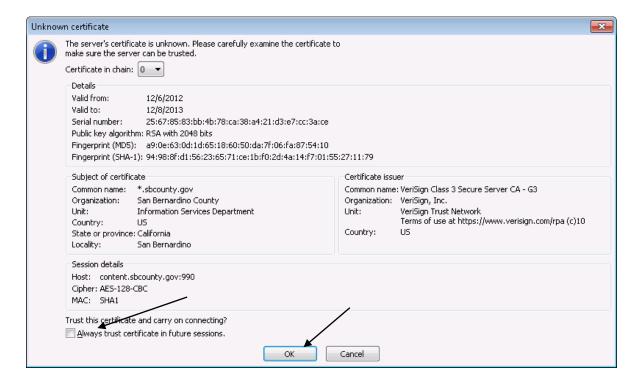
Encryption = "Use plain FTP"

Logon Type = "Normal"

User = "gims_public" [Case Sensitivity applies]

Password = "Password assigned via email when you requested access" [Case Sensitivity applies]

- 9. You have a field or the ability to set **Passive FTP** on, set it. Passive FTP must be set on. It can be the default or found on another tab.
- 10. When you first connect, you will see the following window to confirm the security certificate: Note: If you desire not to see the certificate every time you connect, click the checkbox "Always trust certificate in future sessions" found in the bottom left of the window.



- 11. If you are developing a website, you will need to use an FTP Client to copy code to and from the server. Visual Studio does not support Secure FTP connections at this time. ISD always recommends getting a copy of the code from the server, making your changes locally on your own computer, testing the results, and then upload the changed files. Or the preferred method for .NET developers is to use a local copy of the code on your computer and publish the Build version of your code to the server instead of copying all of the code files.
- 12. If you use **MAC**, you may need to download the FileZilla version to accept the Secure Certificate before the native FTP programs can connect.
- 13. If you are trying to **connect from a server directly**, note that you will need the Public Key for the Secure Certificate. Email the webmaster@sbcounty.gov for information.
- 14. The Webmaster Group also has a **DOS prompt tool** that supports secure FTP that is available upon request. (You will still need to accept the secure Certificate through FileZilla first and check the checkbox to always accept before trying this tool.)

15. Notes about connecting VIA FTP from Mainframe:

Examples of the changes required are below:

Production job prior to changing servers:

```
//NIPE04 JOB ('SHM60S*'),PZ,MSGCLASS=Z,CLASS=B,USER=NI,
// MSGLEVEL=(1,1)
...
//FTP EXEC PGM=FTP,REGION=4096K
//INPUT DD *
    192.168.118.148 (EXIT=99
    dailybook
    password
    cd bookmedia
    put 'nip.external.bookings' bookmed.txt
    put 'nip.external.bookrepo' bookmedia.txt
    quit
//OUTPUT DD SYSOUT=*
//SYSPRINT DD SYSOUT=A
```

Production job after changing to new server:

```
//NIPE04 JOB ('SHM60S*'),PZ,MSGCLASS=Z,CLASS=B,USER=NIFTPS,
//
    MSGLEVEL=(1,1)
       EXEC PGM=FTP,REGION=4096K
//FTP
//SYSFTPD DD DSN=DSP.SECURE.FTP.DATA,DISP=SHR
//INPUT DD *
 CONTENT.SBCOUNTY.GOV 989 (EXIT=99
 CONTENT.SBCOUNTY.GOV|ftpSherBooking
 password
 cd \sheriff\sherbooking\bookmedia
 put 'nip.external.bookings' bookmed.txt
 put 'nip.external.bookrepo' bookmedia.txt
 quit
//OUTPUT DD SYSOUT=*
//SYSPRINT DD SYSOUT=A
```

16. In the above case, not only did the userid/password change on the server, but also the userid that the mainframe batch job runs with must be changed to use a userid that has a certificate assigned to it for accessing the server. If that userid does not exist yet (in this case NIFTPS did because Kimberly has used it on another job and it was created then), it needs to be defined to RACF and the appropriate certificate assigned.